

COMPLIANT MECHANISMS

CENTER

The objective of Compliant Mechanisms is to accelerate and streamline the development and commercialization process of compliant mechanisms, so that they may be quickly licensed to existing or new companies. The use of innovative and patented compliant mechanisms will give existing companies a clear competitive advantage, and will provide a unique and valuable product for new companies. The potential market applications and opportunities are immense.

ACCOMPLISHMENTS

Some examples of compliant mechanisms that have been designed and tested are: fishing reel, bicycle freewheel, derailleur and brakes, pull start for small gasoline engines, centrifugal clutches, string trimmer, small garden tiller clutch, go-cart clutch, continuously variable transmissions (CVT), general purpose belt drive CVT, second generation bicycle CVT prototype, bistable mechanisms, compliant parallel motion mechanisms, constant-force mechanisms, electrical contacts for PDA docking stations, fully compliant bistable micro mechanism, thermal actuators, linear motion micro-bistable mechanism and two position latching mechanism.

BRIGHAM YOUNG UNIVERSITY

Can you imagine.....



A method for redesigning any complex machine part to significantly reduce the number of parts, simplify the manufacturing process, reduce costs and end up with a more reliable and wear-resistant device?



TECHNOLOGY

The Center possesses methods for the design of compliant mechanisms that have reduced part count, reduced cost, and increased precision compared to conventional mechanisms. A number of specific classes of mechanisms have been investigated and developed for commercialization.

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